

ABSTRACT

METHOD, COMPUTER PROGRAM PRODUCT, AND SYSTEM FOR A SELF-THROTTLED COMPUTING TASK

A throttling specification is received by a computer task to direct the computer task's usage of critical computer resources, such as CPU cycles. The computer task comprises units of work, and the elapsed time of each unit of work is calculated as each unit of work completes.

10 Upon the completion of one unit of work, a suspension time is calculated based at least partially on the throttling specification and the elapsed time corresponding to the completed unit of work. Prior to initiating the next unit of work for the computer task, the computer task is suspended for the calculated suspension time. In this manner, other important computing tasks operating in the computer system have access to critical computer resources during the

15 suspension period. Even though the computer task may be given the highest possible priority to ensure a timely and predictable completion, total monopolization of critical computer resources is avoided.